Enterprise Standards and Approved Products

March, 2009

2000 Software Domain			
Category	**Enterprise Standard** (Web Site Links are located at end of document)	**Product(s)** (Web Site Links are located at end of document)	**Effective Date**
2010 **Backup and Recovery**	SEE **6100 – Systems Management Domain**		
2100 **Operating System (O/S) – Desktop and Laptop / Notebook**	32-bit or 64-bit operating system with graphical user interface for Intel processor compatible platform (**Standards Categories 1410, 1420, 1430, 1460 and 1480**).	**Microsoft Windows XP Professional** (latest service pack release). **Microsoft Windows 2000 Professional** (latest service pack release). Windows 2000 Professional is not approved for new installs and will be classified in "sunset" status upon Microsoft's discontinuation of active support. Disapproved for further use: ▪ Microsoft Windows 98. ▪ Windows 95 - Sunset date for Windows 95 was June 30, 2002.	Revision date: December 1, 2008 Effective date: July 1, 1997
2110 **Operating System – Server**	**For zSeries enterprise servers:** POSIX compliant 32-bit operating system. **For RISC platforms:** POSIX compliant 64-bit operating system. **For Intel platforms:** 32-bit or 64-bit operating system. Note: The **Linux OS** is approved on a limited, highly-controlled basis to support specific applications that are dependent on it.	▪ **IBM z/OS** ▪ **UNIX** (see Standard Category 1320 - Application/Database Servers) ▪ **IBM AIX** ▪ **Sun Solaris** ▪ **Red Hat Linux for Windows OS Server** ▪ **Microsoft Windows 2008 Server** ▪ **Microsoft Windows 2003 Server** ▪ **Microsoft Windows 2000 Server** (not approved for new installs) Unless otherwise stated, specific OS versions will be removed as product standards when vendor extended support periods end. Agencies should always plan ahead and terminate their usage of specific OS versions before vendor extended support periods expire.	Revision date: February 18, 2009 Effective date: July 1, 1997

	Category	Enterprise Standard (Web Site Links are located at end of document)	Product(s) (Web Site Links are located at end of document)	Effective Date
2200	**Remote Desktop Control Software**	Requires a PPP TCP/IP based connection. All transmissions must be encrypted using the Secure Sockets Layer (SSL) protocol, and require a non-anonymous login before establishing the session connection. Remote Desktop Control Software is grouped into three categories, depending on its intended purpose: ▪ **Single User** (a user accesses their workstation desktop remotely) ▪ **Multi User** (many users execute applications remotely) ▪ **Remote Administration** (system administrators' access user workstations in order to debug problems and make configuration changes.	**Single User:** ▪ **Windows Remote Desktop Services** ▪ **Symantec pcAnywhere** **Multi User:** ▪ **Windows 2003 Server Terminal Services** ▪ **Windows 2008 Server Terminal Services** ▪ **Citrix MetaFrame** **Remote Administration:** ▪ **Altiris Client Management Suite** ▪ **DameWare** ▪ **Intel LANDesk** ▪ **Microsoft System Management Server (SMS)** ▪ **Microsoft System Center** ▪ **Windows Remote Assistance** feature	Revision date: March 20, 2009 Effective date: July 1, 1997
2210	**Host Print**	TCP/IP host printing	**Brooks Internet Software's Remote Print Manager (RPM)**	Revision date: December 1, 2008 Effective date: July 1, 1997
2300	**Statistical**	Software that operates across the range of platforms used by applications in the commonwealth (desktop, midrange, mainframe) that can extract data, store in various formats, can group data, and can perform all required statistical processes and tests.	▪ **Statistical Analysis System (SAS)**, available for a number of platforms, including desktop, midrange, and mainframe. ▪ **SPSS**	Revision Date: December 1, 2008 Effective Date: July 1, 1997
2310	**Business Intelligence Software**	BI software capable of accessing and integrating data across the diverse range of IT platforms (LAN, departmental, midrange, mainframe) used by applications in the commonwealth, and that can query and extract data, analyze data, group data, store in various formats and can perform all required analytical processes and tests.	▪ **BusinessObjects software suite from SAP** ▪ **Cognos from IBM**	Revision Date: March 20, 2009 Effective Date: November 1, 2005
2330	**Electronic Documents – Non-Alterable**	Portable Document Format (PDF) is the approved format for the creation of non-alterable and non-editable files. **NOTE:** PDF/A, ISO 19005-1:2005 (archival) is the required format for long term document storage to comply with KDLA requirements. PDF, ISO 32000-1:2008 (non-archival) is the standard for short term document storage where archival storage is not a requirement.	**NOTE:** Because of the large number of products now capable of producing electronic forms, no product standard is listed.	Revision date: March 20, 2009 Effective date: March 5, 1999

	Category	Enterprise Standard (Web Site Links are located at end of document)	Product(s) (Web Site Links are located at end of document)	Effective Date
2340	**Electronic Forms**	Various trade and industry associations provide guidelines for the development and design of forms; however no de facto standards exist for electronic forms. Standards do exist for the interface with other applications and these must be followed: ▪ OBDC compliant for links to approved databases ▪ MAPI compliant for use with Microsoft Exchange messaging system ▪ TCP/IP compliant for Internet distribution ▪ Microsoft Internet Explorer and Mozilla Firefox	**NOTE:** Because of the large number of products now capable of producing electronic forms, no product standard is listed. The Division of Printing is providing forms design, development and maintenance of a forms library for accessing forms as requested by participating agencies.	Revision date: March 20, 2009 Effective date: March 5, 1999
2350	**Electronic Commerce – Electronic Data Interchange (EDI)**	SEE **4350 - Data Domain**		
2360	**Electronic Commerce – Magnetic Stripe Card and Reader**	SEE **7360 - Access Domain**		
2370	**Electronic Commerce – Electronic Signature**	**KRS 369.101 to 369.120 -Uniform Electronic Transactions Act** (UETA as enacted by the 2000 General Assembly). **IETF (Internet Engineering Task Force) X.509 Public Key Infrastructure** (PKI latest version for digital certificates) Interoperates and fully supports critical enterprise infrastructure services and applications such as network protocols, desktop operating systems, e-mail, web servers, database management software, firewalls and directory services. Symmetric encryption algorithms required for securing content: U.S. Data Encryption Standard (DES) in accordance with U.S. FIPS PUB 46-2 and ANSI X3.92 and Triple-DES in accordance with ANSI X9.52	NOTE: The approved and recommended products in this category are currently under review. ▪ **Entrust** suite of PKI enabled products for digital signature technology and securing e-mail transport of content and attachments. ▪ **Silanis ApproveIt Desktop**. ApproveIt provides a solution for electronically signing documents and routing for approval via workflow. ▪ **Microsoft Identity Lifecycle Manager** (ILM) is under evaluation for consideration as an enterprise standard.	Revision date: March 20, 2009 Effective date: July 1, 1997

	Category	Enterprise Standard (Web Site Links are located at end of document)	Product(s) (Web Site Links are located at end of document)	Effective Date
2400	Database Management Software	ANSI SQL-92	Enterprise Database Servers: ▪ z/OS platform: **IBM DB2** ▪ UNIX/Linux platform: **IBM DB2**, **Oracle**, **MySQL**** ▪ Wintel platform: **Microsoft SQL Server**, and **Oracle** ▪ Windows platform: **MySQL**** Desktop Databases: ▪ **Microsoft Access** ▪ **Oracle Personal Edition** ▪ **Microsoft SQL Express** **NOTE:** The development and use of desktop databases is discouraged because of the stated architectural direction to share data on common server platforms. Unless otherwise stated, agencies should always plan ahead and terminate their usage of specific database versions before vendor extended support periods end. ** Agency Advisory – these tools have not been fully reviewed for use at an Enterprise level and are not recommended for enterprise applications and/or critical data.	Revision date: March 20, 2009 Effective date: July 1, 1997
2500	Office Suite - Desktop and Notebook / Laptop	Supported by the approved operating systems for desktop and notebook computers Graphical User Interface functionality and compatibility among all tools in the office suite. Integrated import and export support.	▪ **Microsoft Office 2007**** ▪ **Microsoft Office 2003** ▪ **Microsoft Office XP Professional** (latest service pack release) ▪ **Microsoft Office 2000**. Agencies should discontinue new installs of, Office 2000 since mainstream support for the product has ended. The product will be in "sunset" status on the end of extended support, which is slated for 7/14/2009. Unless otherwise stated, specific Office versions will be removed as product standards when Microsoft's extended support period ends. Agencies should always plan ahead and terminate their usage of specific Office versions before Microsoft's extended support period expires. ** Agency Advisory – installations must provide for default 'save' in Office 2003 format. These tools have not been fully reviewed for use at an Enterprise level.	Revision Date: March 20, 2009 Effective Date: July 1, 1997

	Category	Enterprise Standard (Web Site Links are located at end of document)	Product(s) (Web Site Links are located at end of document)	Effective Date
2600	**Electronic Mail, Messaging and Collaboration**	▪ Messaging Application Programming Interface (MAPI) ▪ Simple Mail Transport Protocol (SMTP)	Client Software: ▪ **Microsoft Outlook** Server Software: ▪ **Microsoft Exchange Server 2007** ▪ **Microsoft Exchange Server** ▪ **Nortel CallPilot Desktop Messaging**	Revision date: March 20, 2009 Effective date: July 1, 1997
2610	**Fax Software**	Client/server fax software fully integrated with Microsoft Exchange and Outlook client software.	▪ **eCopy** ▪ **Genifax** ▪ **Nortel CallPilot Desktop Messaging**	Revision date: March 20, 2009 Effective date: July 1, 1997
2700	**Publishing – Desktop**	None.	▪ **Microsoft Publisher** ▪ **Adobe Creative Suite**	Revision date: March 20, 2009 Effective date: July 1, 1997
2705	**HTML Authoring and Web Publishing**	**World Wide Web Consortium (W3C) standards** (HTML 3.2 is an SGML application conforming to International Standard ISO 8879). Full support for HTML 3.2 features as defined by the Internet Engineering Task Force (IETF) and the World Wide Web Consortium (W3C). This is the recommended <u>minimum</u> standard, although HTML 4.0 is the preferred development standard for new applications. This standard will be updated as revisions to the Application Development Domain (8000) are completed.	▪ **Adobe Creative Suite** ▪ **Microsoft Sharepoint Designer** ▪ **Microsoft Visual Studio** ▪ **Microsoft Expression** Only versions currently under mainstream support from Microsoft are authorized for new installation. ▪ Mainstream support for Microsoft FrontPage 2000 has ended; extended support extends to July 2009 and use should be curtailed by that date. Users of FrontPage 98 should upgrade as soon as possible, as continued use threatens network security.	Revision date: March 20, 2009 Effective date: July 1, 1997
2710	**Advanced Drawing – Computer Aided Drafting**	CAD/CADD software generally comes with component libraries, or has component libraries available from third party sources. These component representations must meet the standards applicable to the particular discipline (i.e., IEEE, etc.). In addition, AutoCAD has developed drawing file formats (DXF and DWG) that have become the de facto standards for CADD systems.	▪ Entry Level: **AutoCAD LT** ▪ Full-CADD: **AutoCAD** (latest version released)	Revision Date: June 1, 2006 Effective Date: July 1, 1997
2720	**Advanced Drawing / Illustration / Diagramming**	None.	▪ **Adobe Illustrator** ▪ **Adobe PhotoShop** ▪ **CorelDraw** ▪ **Microsoft Visio** for Diagramming	Revision Date: June 1, 2006 Effective Date: July 1, 1997

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2800	**Geographic Information Systems (GIS) – Server**	Compatible with the approved server operating systems, see 2110 Server Operating System.	**ArcIMS** (Web Mapping Software), **ArcGIS Server** (Server-based GIS), and **ArcSDE** (Enterprise-class Geospatial Storage Environment) and its ancillary modules for the Windows Server Environment, from ESRI.	Revision date: March 20, 2009 Effective date: July 1, 1997
2810	**Geographic Information Systems (GIS) – Desktop**	Compatible with approved desktop operating systems. Windows XP is strongly recommended.	**ArcGIS Desktop** and its ancillary modules for Windows 2000 Professional and Windows XP, from ESRI. Windows XP is the recommended desktop platform. Metadata authoring is carried out using the **ArcCatalog** module within ArcGIS Desktop.	Revision date: June 1, 2006 Effective date: July 1, 1997
2850	**Imaging Solution - OCR/ICR Software**	OCR software offered by vendors on price contract.	**OmniPage** for standalone OCR. OCR software supplied with approved multifunction products (Standard Category 1610) is permitted.	Revision date: June 1, 2006 Effective date: July 1, 1997
2860	**Imaging Solution – Workflow Software**	Workflow software offered by vendors on price contract.	**FileNet** **KnowledgeLake**	Revision date: March 20, 2009 Effective date: July 1, 1997
2870	**Imaging Solution - Control Software for Imaging**	Imaging control software offered by vendors on price contract.	**FileNet** **KnowledgeLake**	Revision date: March 20, 2009 Effective date: July 1, 1997
2900	**Applications Development Methodology and Software**	**SEE 8000 - Application Development Domain**		
2910	**Project Management Software**	**SEE 10100 - Project Management**		

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2920	**Web Content Management Software**	▪ Web Content Accessibility Guidelines (WCAGs) - Priority 1 and Priority 2 published by the **World Wide Web Consortium (W3C)** ▪ Hypertext Markup Language - HTML 4.01 ▪ Extensible Hypertext Markup Language - XHTML 1.0 ▪ Cascading Style Sheet - CSS Levels 1 & 2 ▪ Document Object Model - DOM Level 1 ▪ Synchronized Multimedia Integration Language - SMIL 2.0 ▪ JavaScript & Dynamic HTML – DHTML ▪ Simple Object Access Protocol (SOAP) (Also, see standard category **7020 - Internet/WWW Design and Publishing**.)	▪ **Microsoft Content Management Server** ▪ **Microsoft Office SharePoint**	Effective date: June 1, 2006
2930	**E-Learning Software**	E-learning software capable of producing rich e-learning content, able to access and integrate content from a diverse range of sources used in commonwealth e-learning applications, capable of supporting student and instructor collaboration, and capable of efficiently delivering content across the Internet.	▪ **Elluminate Live! Enterprise Edition** from Elluminate, Inc. for corporate e-learning requirements (except course management). ▪ **Blackboard Academic Suite** from Blackboard, Inc. for academic e-learning requirements, and all course management requirements, both corporate and academic	Revision date: December 1, 2008 Effective date: April 7, 2006
2940	**Help Desk Software**	Must support IT Service Management and ITIL processes and provide compatibility with a wide range of products used in supporting IT infrastructure.	▪ **FrontRange Help Desk** from Front Range Solutions USA, Inc. ▪ **Altiris Help Desk**	Revision date: March 20, 2009 Effective date: June 1, 2006
2950	**Server Virtualization Software**	None.	For the Wintel server environment: ▪ **VMware** from EMC Corp. ▪ **Microsoft Virtual Server 2005 R2** ▪ **Microsoft Windows Server 2008** ▪ **Microsoft Windows Server 2008 Virtualization with Hyper-V**	Revision date: March 20, 2009 Effective date: June 1, 2006

Web Site Links:

External Links: Some of the following links resolve to non-governmental agencies. The information on these pages is not controlled by COT or the Commonwealth of KY.

Category:	Link:	URL:
2910	10100 - Project Management	http://gotsource.ky.gov/docushare/dsweb/Get/Document-300595
2350	4350 - Data Domain	http://gotsource.ky.gov/docushare/dsweb/Get/Document-300632
2010	6100 – Systems Management Domain	http://gotsource.ky.gov/docushare/dsweb/Get/Document-301112
2920	7020 - Internet/WWW Design and Publishing	http://gotsource.ky.gov/docushare/dsweb/Get/Document-300601
2360	7360 - Access Domain	http://gotsource.ky.gov/docushare/dsweb/Get/Document-300601
2900	8000 - Application Development Domain	http://gotsource.ky.gov/docushare/dsweb/Get/Document-301115
2700, 2705	Adobe Creative Suite	http://www.adobe.com/products/creativesuite/
2720	Adobe Illustrator	http://www.adobe.com/products/illustrator/
2720	Adobe PhotoShop	http://www.adobe.com/products/photoshop/family/
2200	Altiris Client Management Suite	http://www.symantec.com/business/client-management-suite
2940	Altiris Help Desk	http://www.symantec.com/business/helpdesk-solution
2810	ArcGIS Desktop	http://www.esri.com/products/index.html#1
2800	ArcGIS Server	http://www.esri.com/software/arcgis/arcgisserver/index.html
2800	ArcIMS	http://www.esri.com/software/arcgis/arcims/index.html
2800	ArcSDE	http://www.esri.com/software/arcgis/arcsde/index.html
2710	AutoCAD	http://usa.autodesk.com/adsk/servlet/index?siteID=123112&id=2704278
2710	AutoCAD LT	http://usa.autodesk.com/adsk/servlet/index?siteID=123112&id=2498418
2930	Blackboard Academic Suite	http://www.blackboard.com/
2210	Brooks Internet Software's Remote Print Manager (RPM)	http://lpd.brooksnet.com/rpmdifferences.html
2310	BusinessObjects software suite from SAP	http://www.sap.com/solutions/sapbusinessobjects/index.epx
2200	Citrix MetaFrame	http://www.citrix.com/lang/English/ps2/migration/index.asp?ntref=hp_nav_US
2310	Cognos from IBM	http://www.cognos.com/
2720	CorelDraw	http://www.corel.com/servlet/Satellite/us/en/Product/1191272117978#versionTabview=tab1&tabview=tab0
2200	DameWare	http://www.dameware.com/
2610	eCopy	http://www.ecopy.com/
2930	Elluminate Live! Enterprise Edition	http://www.elluminate.com/enterprise_edition.jsp
2370	Entrust	http://www.entrust.com/entelligence/index.htm
2940	FrontRange Help Desk	http://www.frontrange.com/

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Category:	Link:	URL:
2860	FileNet Image Services	http://www-01.ibm.com/software/data/content-management/filenet-image-services/
2610	Genifax	http://www.omtool.com/products/genifax.cfm
2110	IBM AIX	http://www-03.ibm.com/systems/power/software/aix/index.html
2400	IBM DB2	http://www-01.ibm.com/software/data/db2/
2110	IBM z/OS	http://www-03.ibm.com/systems/z/os/zos/
2370	IETF (Internet Engineering Task Force) X.509 Public Key Infrastructure	http://www.ietf.org/html.charters/pkix-charter.html
2200	Intel LANDesk	http://www.intel.com/support/landesk/index.htm
2860	KnowledgeLake	http://www.knowledgelake.com/
2370	KRS 369.101 to 369.120	http://www.lrc.state.ky.us/KRS/369-00/CHAPTER.HTM
2400	Microsoft Access	http://office.microsoft.com/en-us/access/default.aspx
2920	Microsoft Content Management Server	http://www.microsoft.com/cmserver/default.mspx
2600	Microsoft Exchange Server	http://www.microsoft.com/india/exchange/
2600	Microsoft Exchange Server 2007	http://www.microsoft.com/exchange/default.mspx
2705	Microsoft Expression	http://www.microsoft.com/expression/products/Overview.aspx?key=studio
2370	Microsoft Identity Lifecycle Manager	http://www.microsoft.com/windowsserver/ilm2/Overview.mspx
2500	Microsoft Office 2000	http://support.microsoft.com/ph/2484
2500	Microsoft Office 2003	http://office.microsoft.com/en-us/downloads/CD010224941033.aspx
2500	Microsoft Office 2007	http://office.microsoft.com/en-us/FX102855291033.aspx
2920	Microsoft Office SharePoint	http://www.microsoft.com/Sharepoint/default.mspx
2500	Microsoft Office XP Professional	http://www.microsoft.com/downloads/details.aspx?FamilyID=1A8CE553-AB76-4A63-99DA-B4ED914C1514&displaylang=EN
2600	Microsoft Outlook	http://office.microsoft.com/en-us/outlook/default.aspx
2700	Microsoft Publisher	http://office.microsoft.com/en-us/publisher/FX100487821033.aspx
2705	Microsoft Sharepoint Designer	http://office.microsoft.com/en-us/sharepointdesigner/FX100487631033.aspx
2400	Microsoft SQL Express	http://www.microsoft.com/express/sql/default.aspx
2400	Microsoft SQL Server	http://www.microsoft.com/sqlserver/2008/en/us/default.aspx
2200	Microsoft System Center	http://www.microsoft.com/systemcenter/en/us/default.aspx
2200	Microsoft System Management Server (SMS)	http://www.microsoft.com/SMServer/default.mspx

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2950	Microsoft Virtual Server 2005 R2	http://www.microsoft.com/windowsserversystem/virtualserver/
2720	Microsoft Visio	http://office.microsoft.com/en-us/visio/FX100487861033.aspx
2705	Microsoft Visual Studio	http://www.microsoft.com/visualstudio/en-us/default.mspx
2100	Microsoft Windows 2000 Professional	http://technet.microsoft.com/en-us/windowsserver/2000/default.aspx
2110	Microsoft Windows 2000 Server	http://technet.microsoft.com/en-us/windowsserver/2000/default.aspx
2110	Microsoft Windows 2003 Server	http://www.microsoft.com/windowsserver2003/default.mspx
2110, 2950	Microsoft Windows 2008 Server	http://www.microsoft.com/windowsserver2008/en/us/default.aspx
2950	Microsoft Windows Server 2008 Virtualization with Hyper-V	http://www.microsoft.com/windowsserver2008/en/us/hyperv.aspx
2100	Microsoft Windows XP Professional	http://www.microsoft.com/windowsxp/pro/default.mspx
2400	MySQL	http://www.mysql.com/
2600, 2610	Nortel CallPilot Desktop Messaging	http://products.nortel.com/go/product_content.jsp?segId=0&parId=0&prod_id=44039
2850	OmniPage	http://www.nuance.com/omnipage/
2400	Oracle	http://www.oracle.com/index.html
2400	Oracle Personal Edition	http://www.oracle.com/technology/software/products/8i_personal/index.html
2110	Red Hat Linux for Windows OS Server	https://www.redhat.com/
2370	Silanis ApproveIt Desktop	http://www.silanis.com/solutions/e-signatures-desktop.html
2300	SPSS	http://www.spss.com/
2100	Standards Categories 1410, 1420, 1430, 1460 and 1480	http://gotsource.ky.gov/docushare/dsweb/Get/Document-300615
2300	Statistical Analysis System (SAS)	http://www.sas.com/
2110	Sun Solaris	http://www.sun.com/software/solaris/
2200	Symantec pcAnywhere	http://www.symantec.com/norton/symantec-pcanywhere
2110	UNIX	http://www.unix.org/
2950	VMware	http://www.vmware.com/
2200	Windows 2003 Server Terminal Services	http://www.microsoft.com/windowsserver2003/technologies/terminalservices/default.mspx
2200	Windows 2008 Server Terminal Services	http://www.microsoft.com/windowsserver2008/en/us/ts-product-home.aspx
2200	Windows Remote Assistance	http://support.microsoft.com/kb/300546
2200	Windows Remote Desktop Services	http://www.microsoft.com/windowsxp/using/mobility/getstarted/remoteintro.mspx
2705, 2920	World Wide Web Consortium (W3C)	http://www.w3.org/